

**ABSTRACT OF THE DISCLOSURE**

Manufacturing lines include inspection systems for monitoring the quality of parts produced. Manufacturing lines for making semiconductor devices generally inspect each fabricated part. The information obtained is used to fix manufacturing problems in the semiconductor fab plant. A machine-vision system for inspecting devices includes a flipper mechanism. After being inspected at a first station, a tray-transfer device moves the tray from the first inspection station to a flipper mechanism. The flipper mechanism includes two jaws, a mover, and a rotator. The flipper mechanism turns the devices over and places the devices in a second tray so that another surface of the device can be inspected. A second tray-transfer device moves the second tray from the flipper to a second inspection station. The mover of the flipper mechanism removes the tray from the first inspection surface and places a tray at the second inspection surface.

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